

FIG. 1

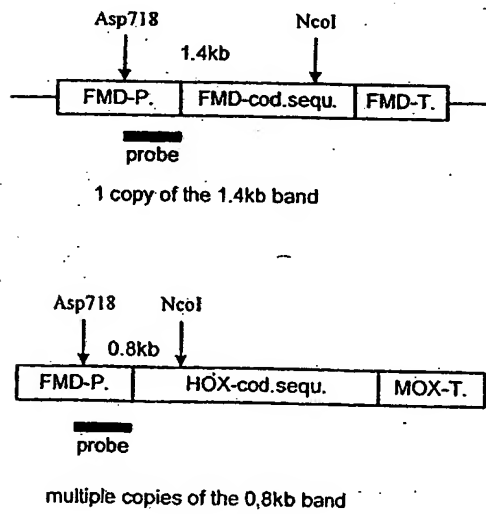


FIG. 2A

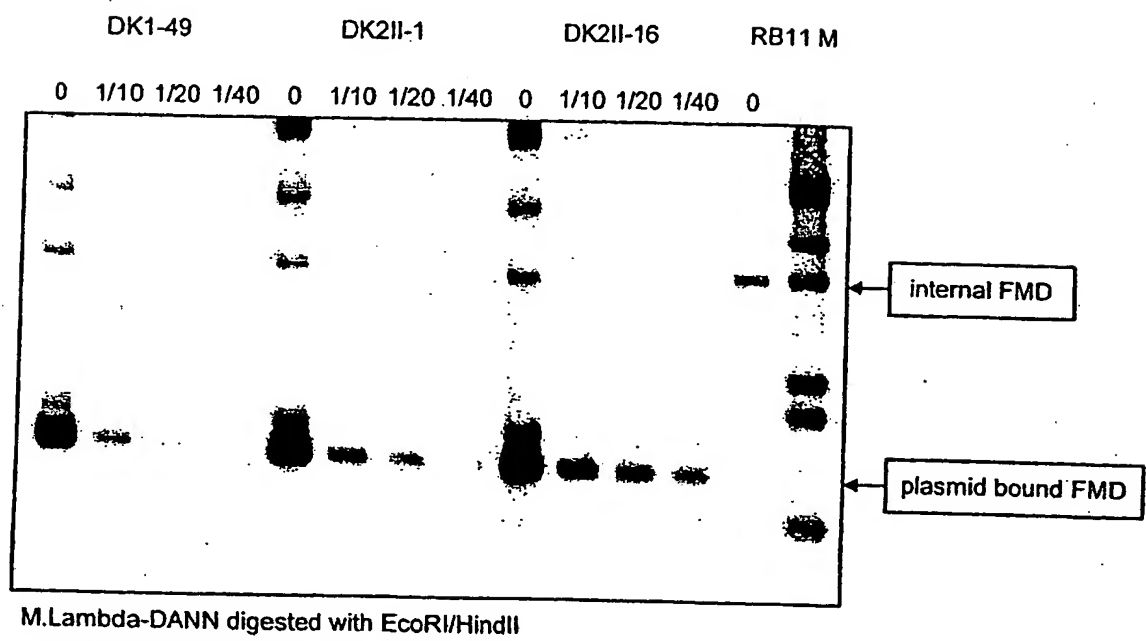
Southern for copy number estimation

FIG. 2B

FIG. 3A

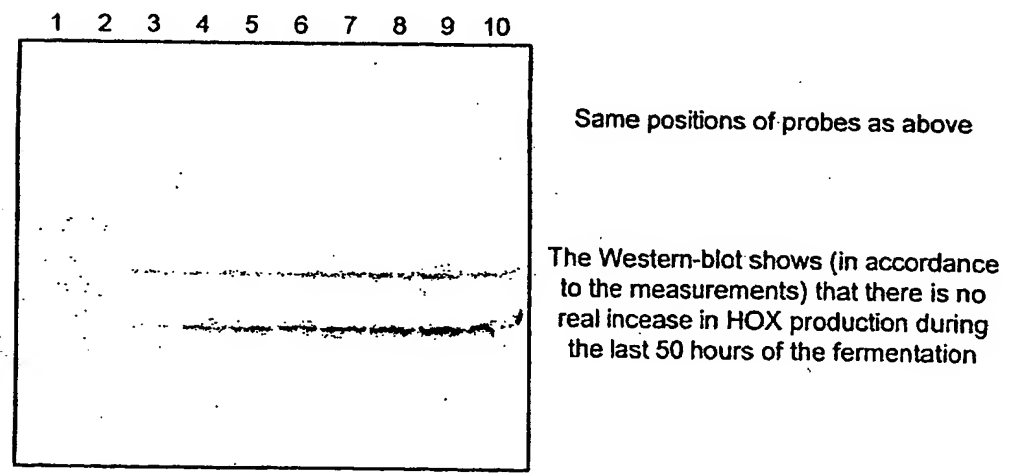
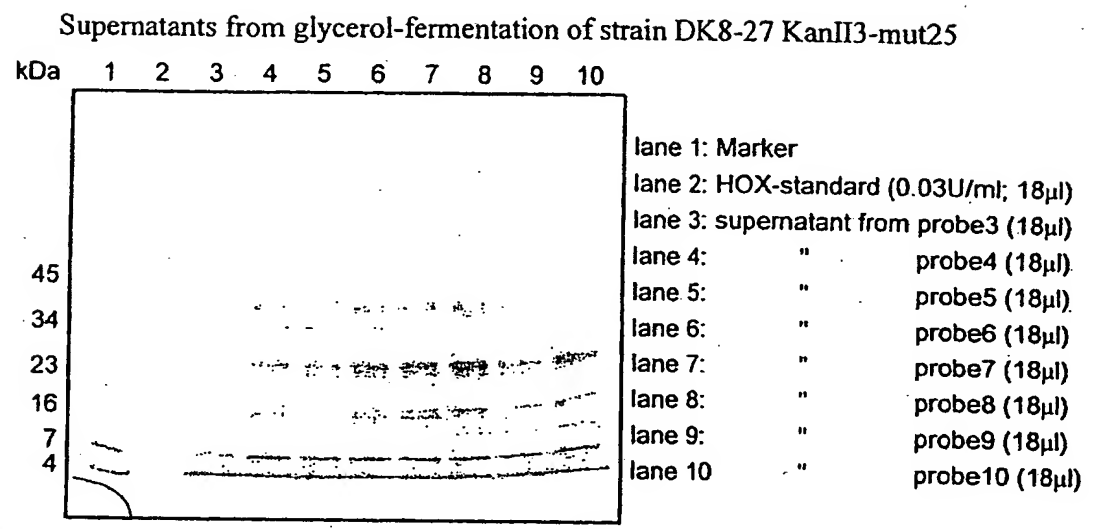


FIG. 3B

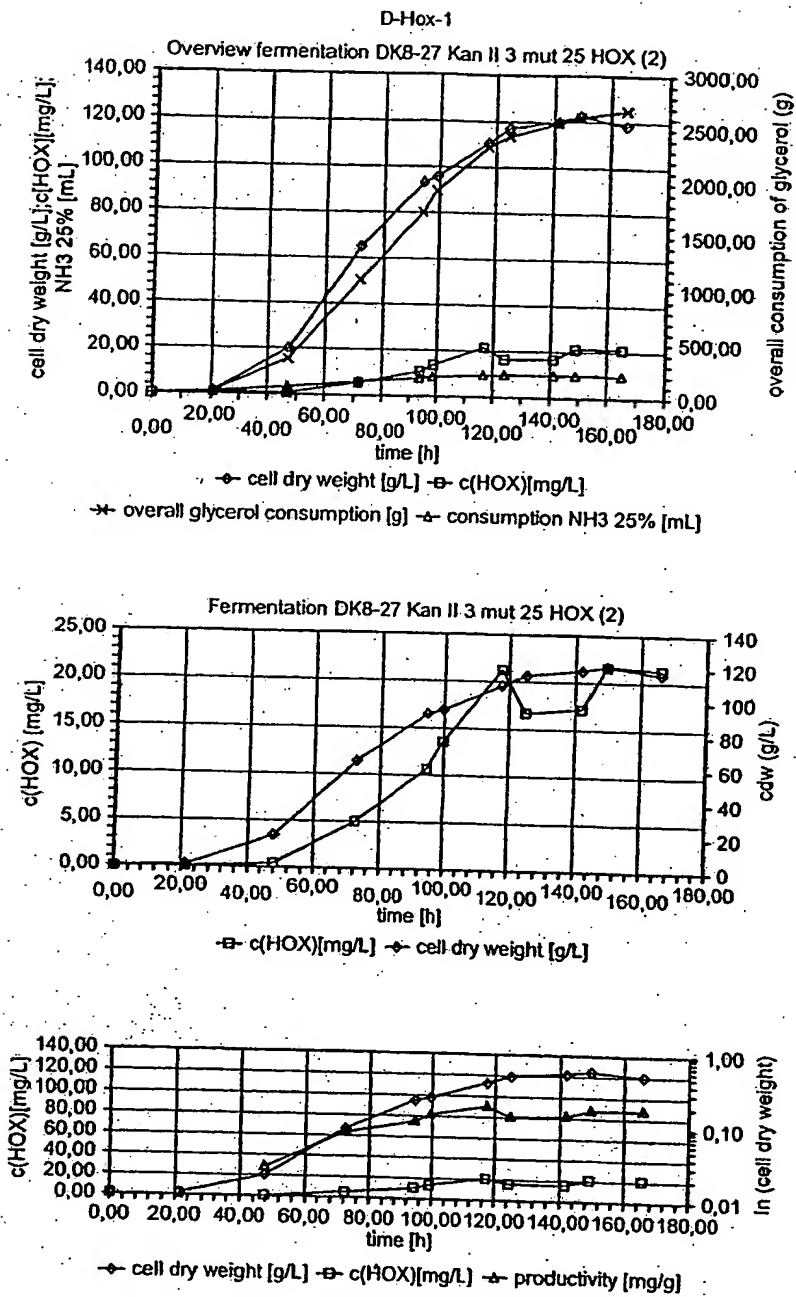


FIG. 4

FIG. 5A

FIG. 5

FIG. 5A

FIG. 5B

hox1A

ACTCCATGGCTACTTTGCCACAAAAGGACCCAGGTTACATTGTTATTGACG
TCAACGCTGG (SEQ ID No 2)

hox2B

CGAAATCGATGTTGGTACCAATCCATCTTCTGTTGAAACCTTGCTTCATGG
ATGGCAATCTTGGGTCAGGCTTGTCTGGAGTACCAGCGTTGACGTCAATAA
CAATG (SEQ ID No 3)

hox3a

GATTGGTACCAACATCGATTTTCGTTTACGTCGTTTACACTCCACAAGGTGC
TTGTACTGCTTTGGACAGAGCTATGGAAAAGTGTCTCCAGGTACCGTCAG
AATC (SEQ ID No 4)

hox4b

TTCAACCAAACCAGTAACGTTGATAATAGCCTTGACACATTTCGTGAAAAC
GAAGTCTTCGTAACAGTGACCACCAGAAACGATTCTGACGGTACCTGGAGA
ACAC (SEQ ID No 5)

hox5a

ATCAACGTTACTGGTTTGGTTGAATCTGGTTACGACGACGATAGAGGTTAC
TTCGTCTCTTCGGTGACACCAACTGGGGTTCCTTCAAGACCTTGTTTCAGA
GACCACGGTAGAGTTTTG (SEQ ID No 6)

hox6b

CAAACCGTGCAATCTGGCCAAAATACCGTCACCTCCACCGACAATGTGACC
ACCCAAACCGACGGAGTAACAGGAACCACTGGCAAACTCTACCGTGGTC
TCTGAAC (SEQ ID No 7)

hox7a

TTGGCCAGATTGCACGTTTGGCCAGTCGATTGGTTATCCGGTGTTGAAGT
TGTCGTTAAGCCAGTCTTGACCGAAGACTCTGTTCTTAAGTACGTTACAA
GGATTCC (SEQ ID No 8)

hox8b

GGCAAATCCTTGAAGTAGTATTTGGTGATAATACCGAAGTTACCTCCACCT
CCACCAGTGTGAGCCAAAACAACTCACCGTCGTTACCTTCGGAATCCTTG
TGAACGTACTTAAG (SEQ ID No 9)

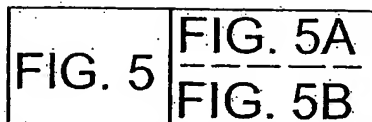
hox9a

CAAATACTACTTCAAGGATTTGCCAATGTCTCCAAGAGGTGTCATCGCTTC
TAACTTACACTTCTCTTGGGACGGTTTCACTAGAGATGCCTTGCAAGATTT
GTTGACTAAGTACTTC (SEQ ID No 10)

hox10b

GGAGGTATACAAGTACATAACAACTCTTCAGCTGCTTGGTGGAAGATTTG
GAACTTACCAACAGTATTCTTCCAATCACATCTAGCCAACCTTGAAGTACTT
AGTCAACAAATCTTGC (SEQ ID No 11)

FIG. 5B

**primer 1**

ATCTTCCATCAGGCAGCTGAAGAGTTTGTATGTACTTGTATACATCCTAC
TCTAACGACGCCGAGAGAGAAGTTGCCCAAGACAGACACTATCAT
(SEQ ID No 12)

primer 2

GAAAGGAGCCCAACCAGCATGACCACCAAGAGCTTGGTAGGCTC 3T
TTTGTAGATCTGTTCAATGTCAGCCTCCAAATGATAGTGTCTGTCTTGGGC
(SEQ ID No 13)

primer 3

GCTGGTTGGGCTCCTTTCCCTGTTAGACCTAGACCTAGACACACATCCAAG
ACTTCTTATATGCATGACGAGACTATGGACTACCCCTTC
(SEQ ID No 14)

primer 4

AATCTGGAAGTCTGGAAAGTCCTTGATCATGTAAGCAGACTTGTACTTACC
TCTCTGATTAGGACCGGAACCGTTGATAGTCTCAGTCAAAGCGTAGAAAGG
GTAGTCCATAGTCTCGTC (SEQ ID No 15)

primer 5

GACTTTCCAGACTTCCAGATTGATGTTATCTGGAAATACCTTACTGAGGTT
CCTGACGGTTTACTAGTGCCGAAATGAAGGATGCTCTTCTTCAGGTTGAT
ATGTTT (SEQ ID No 16)

primer 6

CTTGTCTTCTTCCCTGCCAGTATGTCTGGTACTGCAGTTTGATGATGTACTC
TCTCTGAGCAACTGCAGTAGCATCCCAACAACCTTGTGAATCTCACCACC
GAACATATCAACCTGAAGAAGAGC (SEQ ID No 17)

primer 7

ACATACTGGCAGGAAGAAGACAAGGATGCAGTTAACTTGAAGTGGATTAGA
GACTTTTACGAGGAGATGTATGAGCCTTATGGTGGTGTCCAGACCCTAAC
ACTCAG (SEQ ID No 18)

primer 8

GGCACCATACTTACCGTTCTTCCAGTTGTTCAAGTCAACATCAGGGTAGTT
GAAGTAGCATCCCTCAAAACACCTTTACCACTCTCAACCTGAGTGTTAGG
GTCTGGAAC (SEQ ID No 19)

primer 9

AAGAACGGTAAGTATGGTGCCTTGGAACTTTACTTTTTGGGTAACCTGAAC
AGATTGATCAAGGCCAAATGGTTGTGGGATCCTAACGAGATCTTCACAAAC
AAACAGTCTATCCCT (SEQ ID No 20)

primer 10

GAATTCCGCGGCCCTACTATTAGTCTGCTTAGGCTCCTTAAGAGGTTT
AGTAGGGATAGACTGTTTGTGTTGTGAA (SEQ ID No 21)

FIG. 6A

(SEQ ID No 22)

FIG. 6

FIG. 6A

FIG. 6B

Molecule Name: hoxpic
 Sequence Printed: 1-1644 (Full)
 Description:

1644 bps DNA Linear
 Date Printed 04 Jun 1999

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1  ATG GCT ACT TTG CCA CAA AAG GAC CCA GGT TAC ATT GTT ATT
   M  A  T  L  P  Q  K  D  P  G  Y  I  V  I

43  GAC GTC AAC GCT GGT ACT CCA GAC AAG CCT GAC CCA AGA TTG
   D  V  N  A  G  T  P  D  K  P  D  P  R  L

85  CCA TCC ATG AAG CAA GGT TTC AAC AGA AGA TGG ATT GGT ACC
   P  S  M  K  Q  G  F  N  R  R  W  I  G  T

127 AAC ATC GAT TTC GTT TAC GTC GTT TAC ACT CCA CAA GGT GCT
   N  I  D  F  V  Y  V  V  Y  T  P  Q  G  A

169 TGT ACT GCT TTG GAC AGA GCT ATG GAA AAG TGT TCT CCA GGT
   C  T  A  L  D  R  A  M  E  K  C  S  P  G

211 ACC GTC AGA ATC GTT TCT GGT GGT CAC TGT TAC GAA GAC TTC
   T  V  R  I  V  S  G  G  H  C  Y  E  D  F

253 GTT TTC GAC GAA TGT GTC AAG GCT ATT ATC AAC GTT ACT GGT
   V  F  D  E  C  V  K  A  I  I  N  V  T  G

295 TTG GTT GAA TCT GGT TAC GAC GAC GAT AGA GGT TAC TTC GTC
   L  V  E  S  G  Y  D  D  D  R  G  Y  F  V

337 TCT TCC GGT GAC ACC AAC TGG GGT TCC TTC AAG ACC TTG TTC
   S  S  G  D  T  N  W  G  S  F  K  T  L  F

379 AGA GAC CAC GGT AGA GTT TTG CCA GGT GGT TCC TGT TAC TCC
   R  D  H  G  R  V  L  P  G  G  S  C  Y  S

421 GTC GGT TTG GGT GGT CAC ATT GTC GGT GGA GGT GAC GGT ATT
   V  G  L  G  G  H  I  V  G  G  G  D  G  I

463 TTG GCC AGA TTG CAC GGT TTG CCA GTC GAT TGG TTA TCC GGT
   L  A  R  L  H  G  L  P  V  D  W  L  S  G

505 GTT GAA GTT GTC GTT AAG CCA GTC TTG ACC GAA GAC TCT GTT
   V  E  V  V  V  K  P  V  L  T  E  D  S  V

547 CTT AAG TAC GTT CAC AAG GAT TCC GAA GGT AAC GAC GGT GAG
   L  K  Y  V  H  K  D  S  E  G  N  D  G  E

589 TTG TTT TGG GCT CAC ACT GGT GGA GGT GGA GGT AAC TTC GGT
   L  F  W  A  H  T  G  G  G  G  G  G  N  F  G

631 ATT ATC ACC AAA TAC TAC TTC AAG GAT TTG CCA ATG TCT CCA
   I  I  T  K  Y  Y  F  K  D  L  P  M  S  P

673 AGA GGT GTC ATC GCT TCT AAC TTA CAC TTC TCT TGG GAC GGT
   R  G  V  I  A  S  N  L  H  F  S  W  D  G

715 TTC ACT AGA GAT GCC TTG CAA GAT TTG TTG ACT AAG TAC TTC
   F  T  R  D  A  L  Q  D  L  L  T  K  Y  F

757 AAG TTG GCT AGA TGT GAT TGG AAG AAT ACT GTT GGT AAG TTC
   K  L  A  R  C  D  W  K  N  T  V  G  K  F
  
```

FIG. 6B

FIG. 6	FIG. 6A
	FIG. 6B

799 CAA ATC TTC CAC CAA GCA GCT GAA GAG TTT GTT ATG TAC TTG
 Q I F H Q A A E E P V M Y L
 841 TAT ACA TCC TAC TCT AAC GAC GCC GAG AGA GAA GTT GCC CAA
 Y T S Y S N D A E R E V A Q
 883 GAC AGA CAC TAT CAT TTG GAG GCT GAC ATT GAA CAG ATC TAC
 D R H Y H L E A D I E Q I Y
 925 AAA ACA TGC GAG CCT ACC AAA GCT CTT GGT GGT CAT GCT GGT
 K T C E P T K A L G G H A G
 967 TGG GCT CCT TTC CCT GTT AGA CCT AGA AAG AGA CAC ACA TCC
 W A P F P V R P R K R H T S
 1009 AAG ACT TCT TAT ATG CAT GAC GAG ACT ATG GAC TAC CCT TTC
 K T S Y M H D E T M D Y P F
 1051 TAC GCT TTG ACT GAG ACT ATC AAC GGT TCC GGT CCT AAT CAG
 Y A L T E T I N G S G P N Q
 1093 AGA GGT AAG TAC AAG TCT GCT TAC ATG ATC AAG GAC TTT CCA
 R G K Y K S A Y M I K D F P
 1135 GAC TTC CAG ATT GAT GTT ATC TGG AAA TAC CTT ACT GAG GTT
 D F Q I D V I W K Y L T E V
 1177 CCT GAC GGT TTG ACT AGT GCC GAA ATG AAG GAT GCT CTT CTT
 P D G L T S A E M K D A L L
 1219 CAG GTT GAT ATG TTC GGT GGT GAG ATT CAC AAG GTT GTT TGG
 Q V D M F G G E I H K V V W
 1261 GAT GCT ACT GCA GTT GCT CAG AGA GAG TAC ATC ATC AAA CTG
 D A T A V A Q R E Y I I K L
 1303 CAG TAC CAG ACA TAC TGG CAG GAA GAA GAC AAG GAT GCA GTT
 Q Y Q T Y W Q E E D K D A V
 1345 AAC TTG AAG TGG ATT AGA GAC TTT TAC GAG GAG ATG TAT GAG
 N L K W I R D F Y E E M Y E
 1387 CCT TAT GGT GGT GTT CCA GAC CCT AAC ACT CAG GTT GAG AGT
 P Y G G V P D P N T Q V E S
 1429 GGT AAA GGT GTT TTT GAG GGA TGC TAC TTC AAC TAC CCT GAT
 G K G V F E G C Y F N Y P D
 1471 GTT GAC TTG AAC AAC TGG AAG AAC GGT AAG TAT GGT GCC TTG
 V D L N N W K N G K Y G A L
 1513 GAA CTT TAC TTT TTG GGT AAC CTG AAC AGA TTG ATC AAG GCC
 E L Y P L G N L N R L I K A
 1555 AAA TGG TTG TGG GAT CCT AAC GAG ATC TTC ACA AAC AAA CAG
 K W L W D P N E I F T N K Q
 1597 TCT ATC CCT ACT AAA CCT CTT AAG GAG CCT AAG CAG ACT AAA
 S I P T K P L K E P K Q T K
 1639 TAG TAG

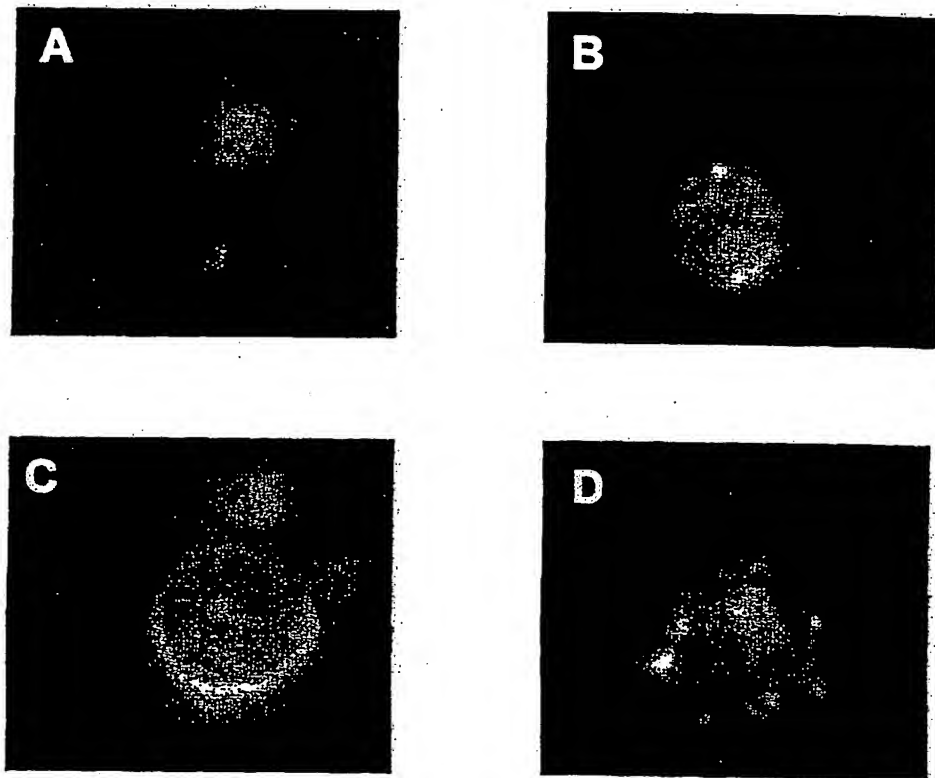


FIG. 7

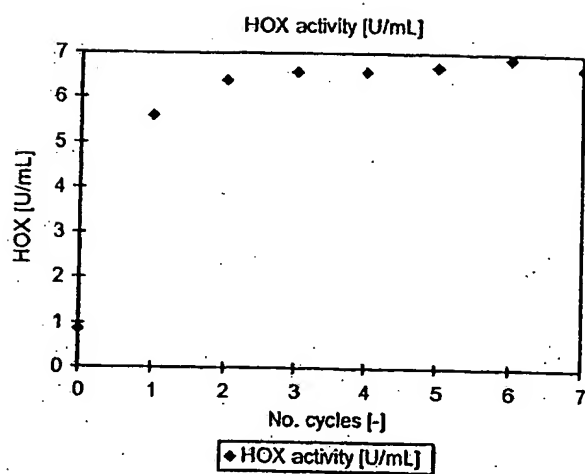


FIG. 8

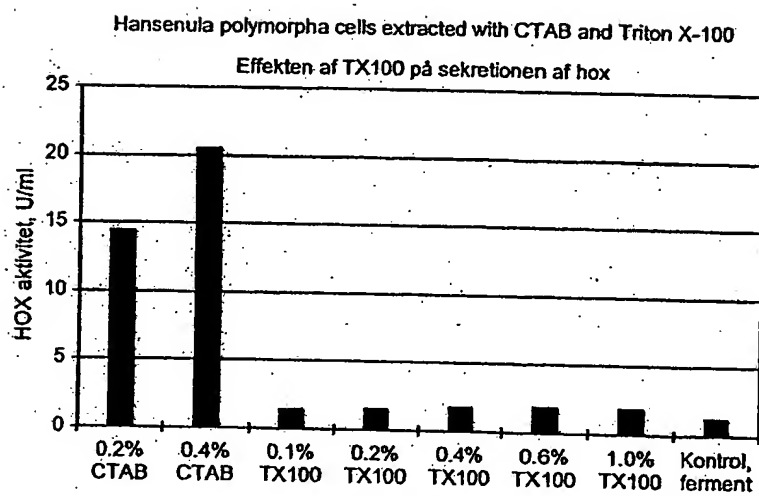


FIG. 9

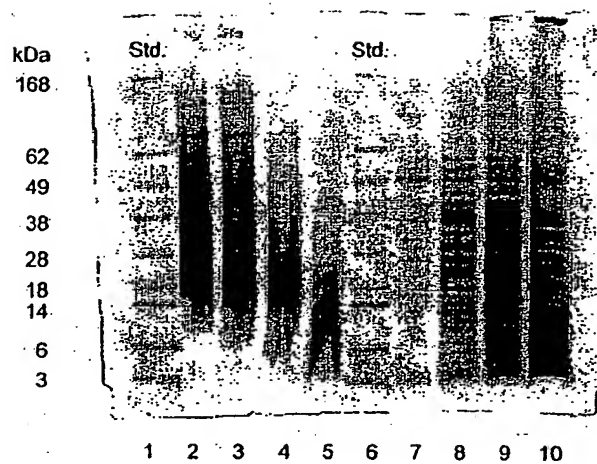


FIG. 10A

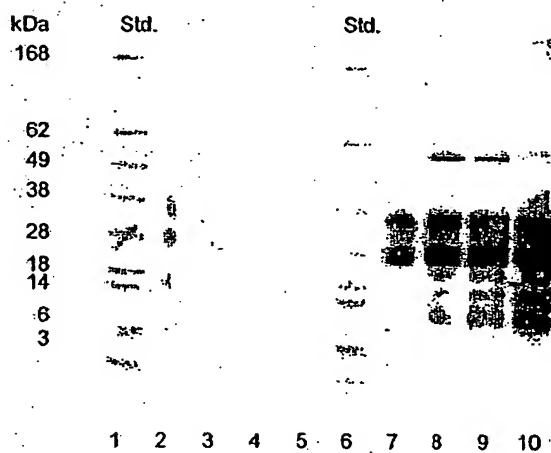


FIG. 10B

12 μ 4

FIG. 11A

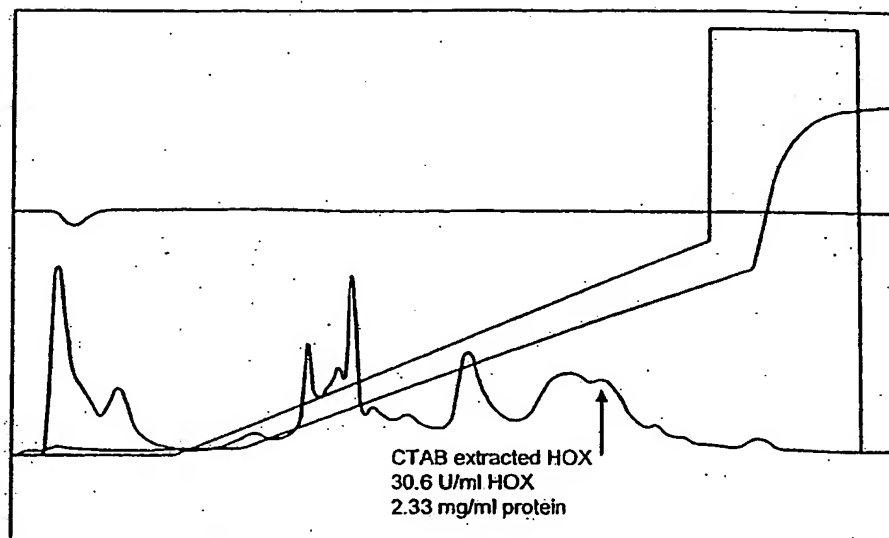
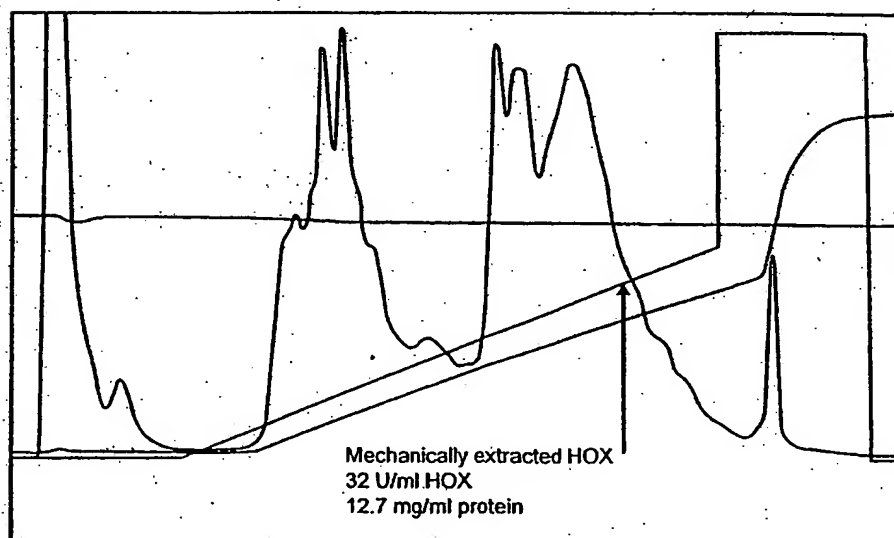


FIG. 11B



13 p²⁴

FIG. 12A

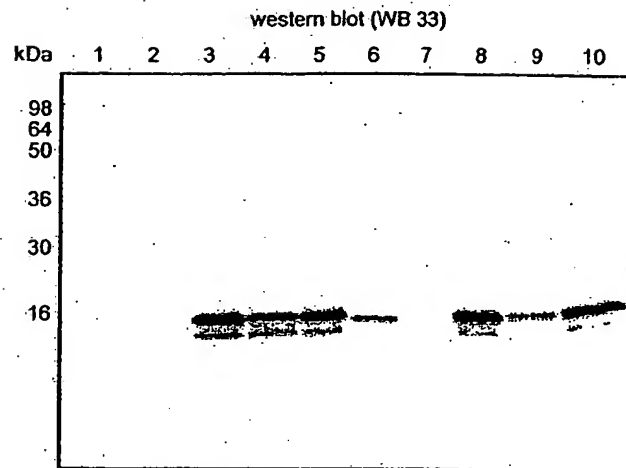


FIG. 12B

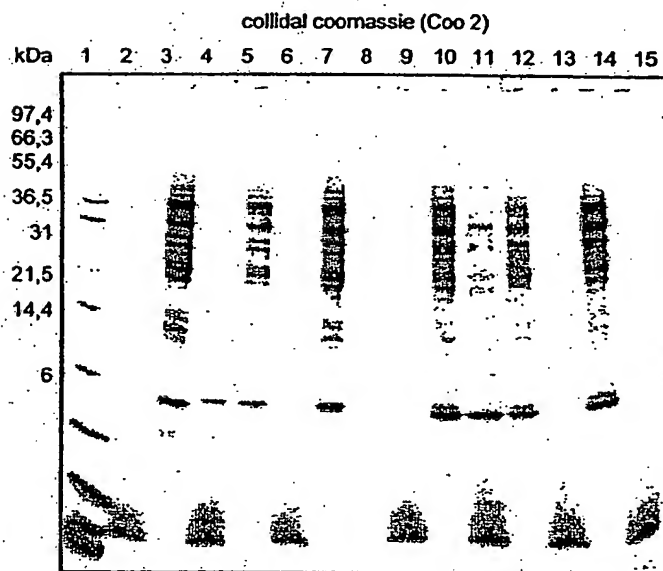


FIG. 13A

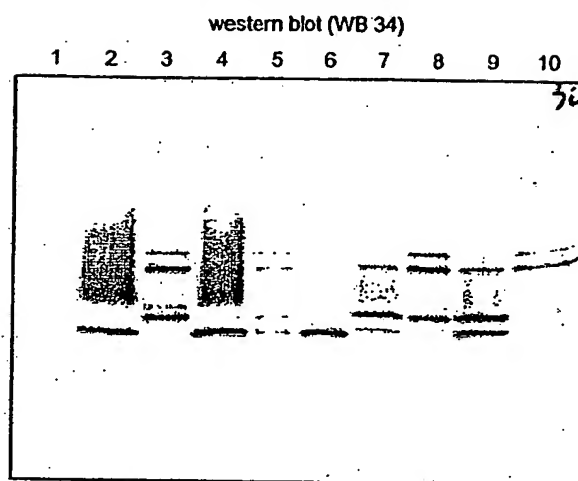


FIG. 13B

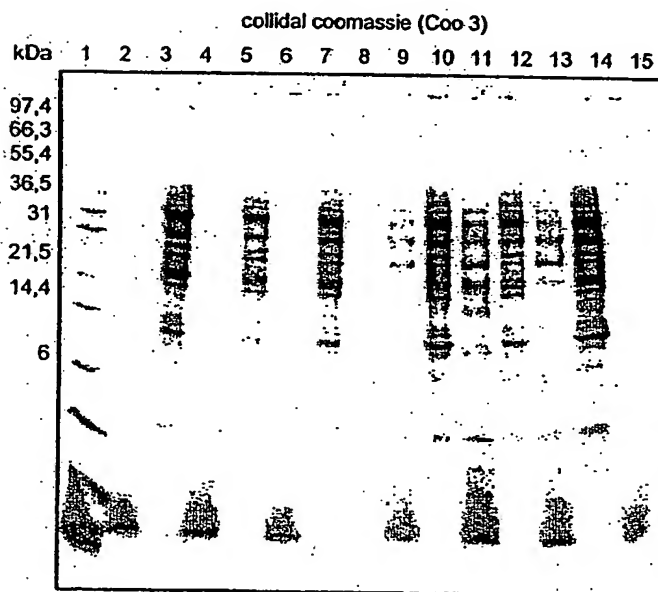


FIG. 14A

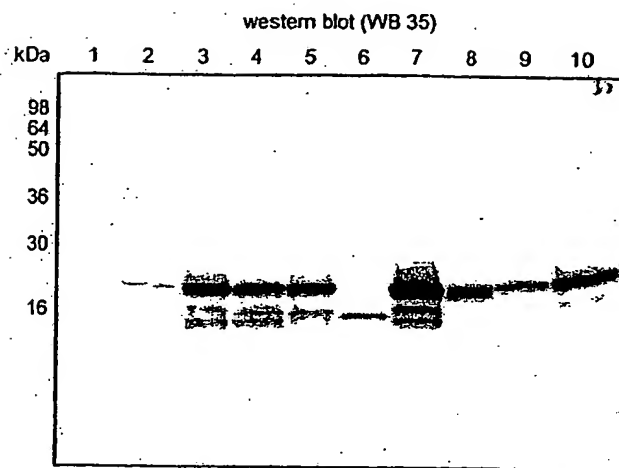


FIG. 14B

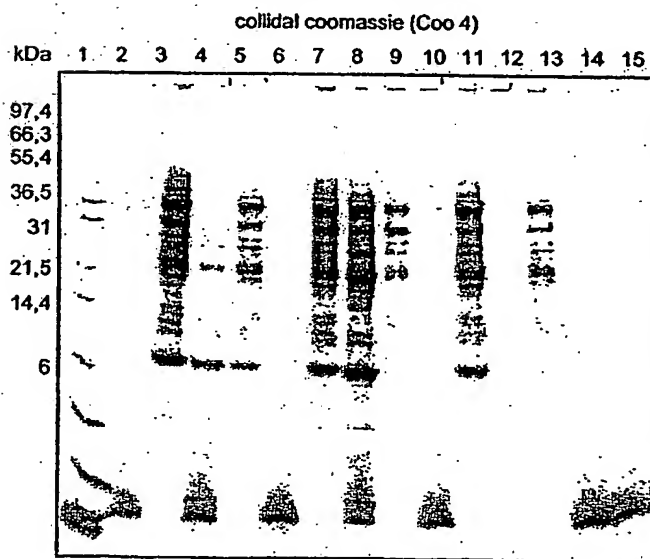


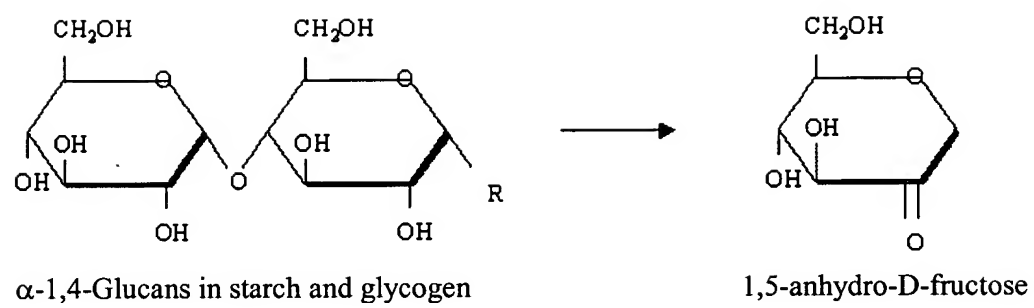
FIGURE 15

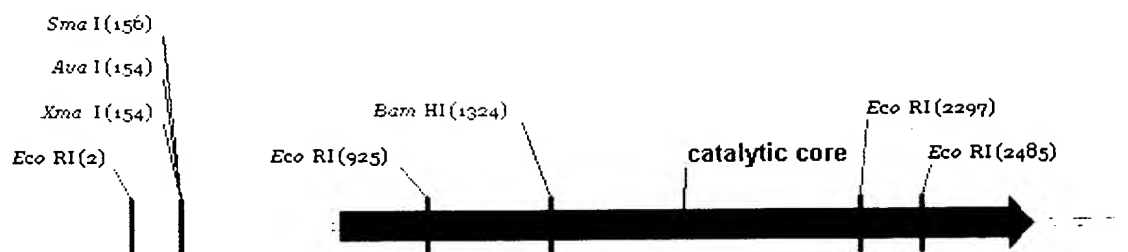
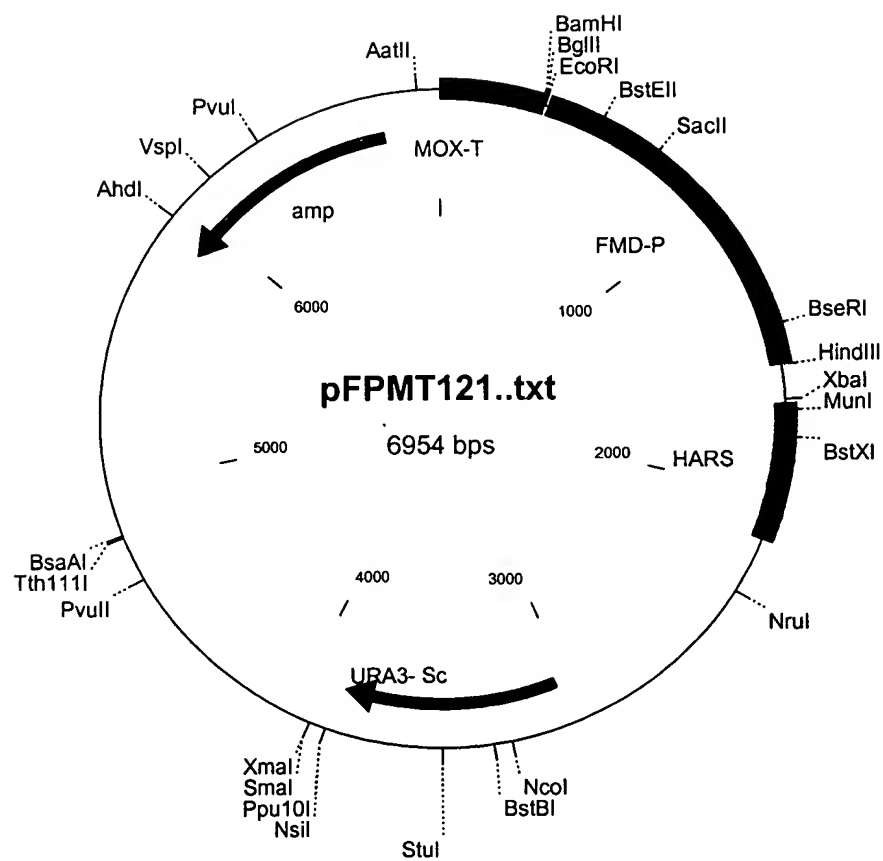
FIGURE 16A**FIGURE 16B**

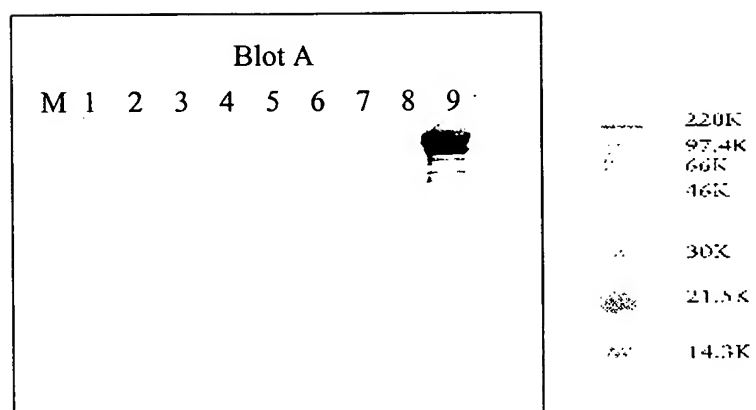
FIGURE 17A

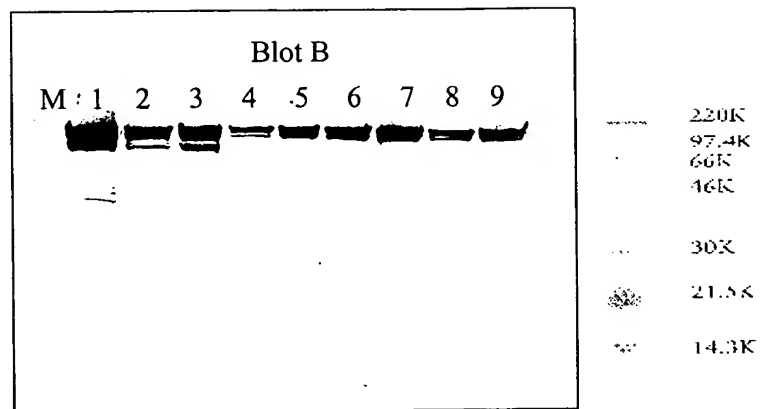
FIGURE 17B

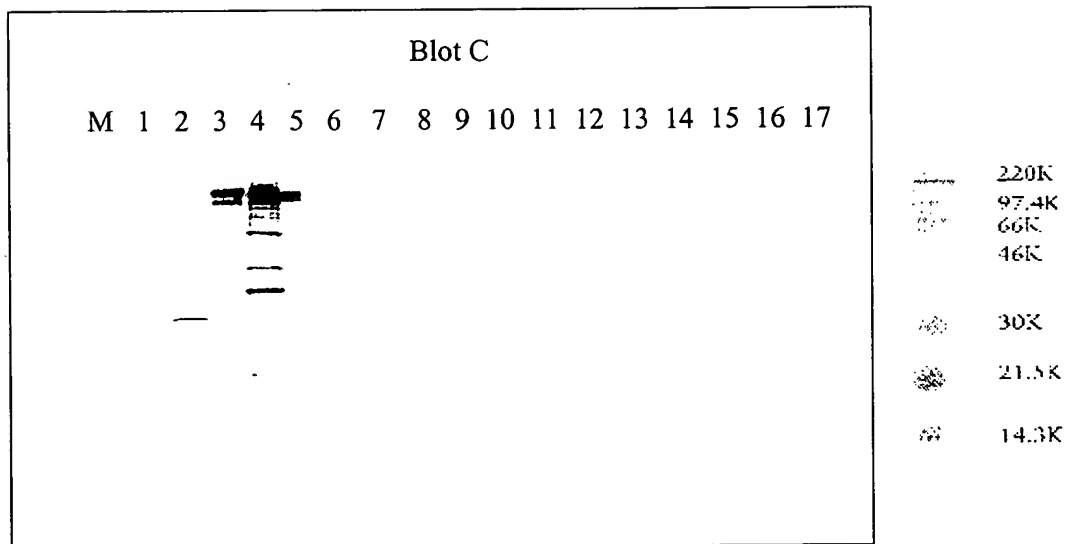
FIGURE 17C

FIGURE 18

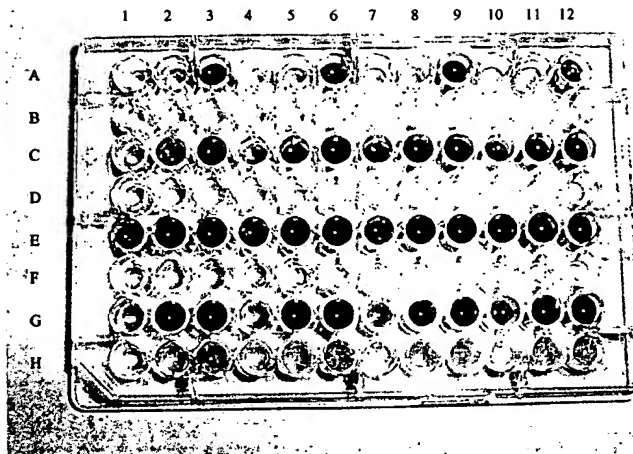


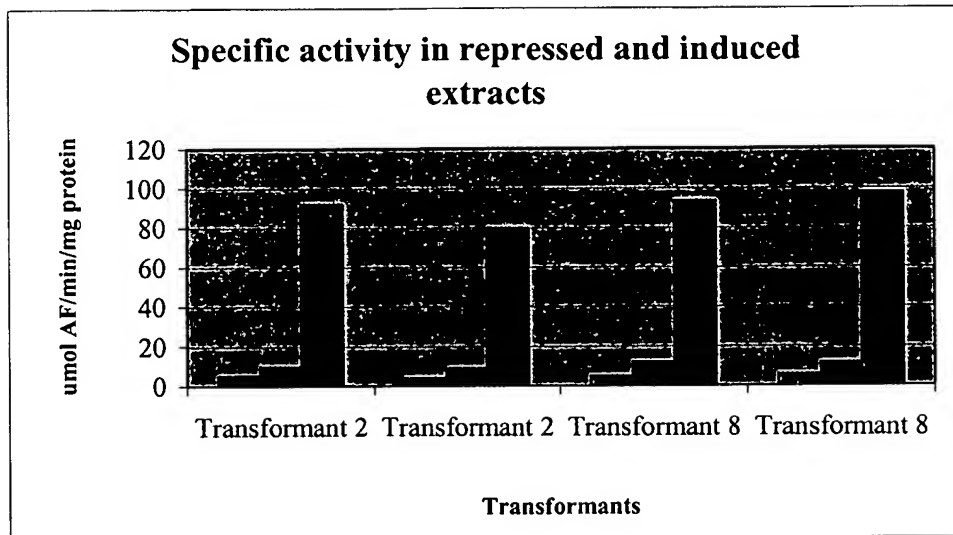
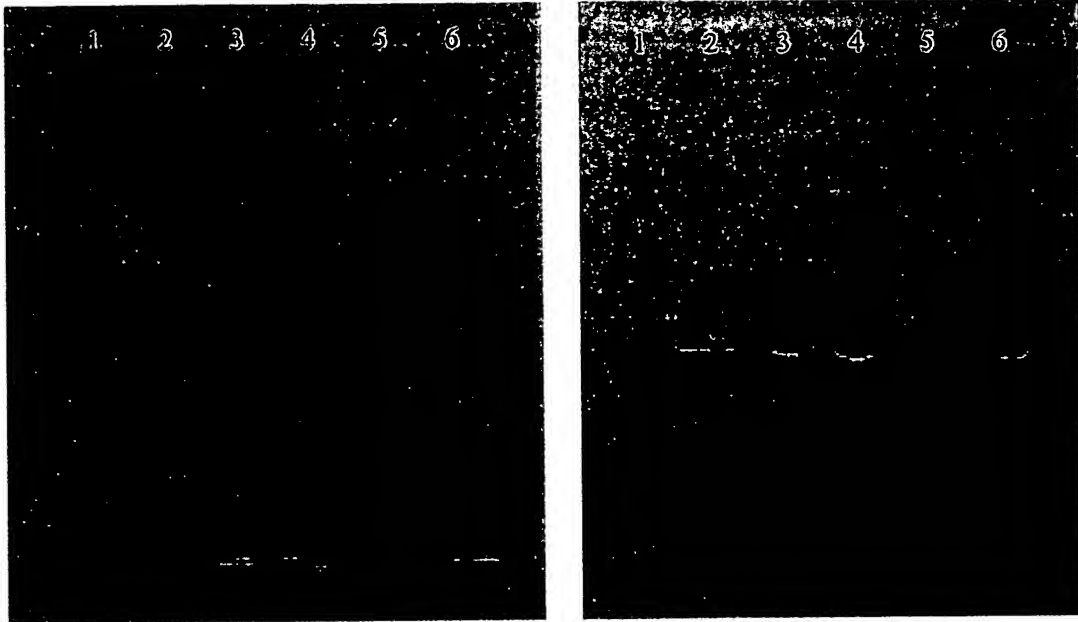
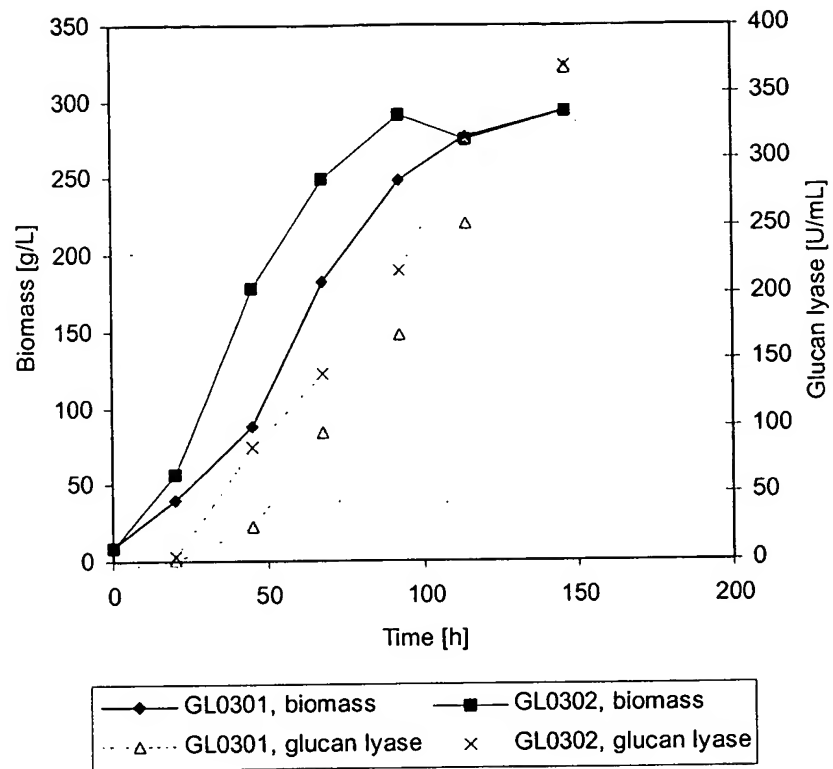
FIGURE 19

FIGURE 20



**FIGURE 21**

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